

AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth below in marked-up form:

1. (Previously Presented) A power amplifier comprising:

a field effect transistor,
a bias voltage supply terminal supplied with a positive bias voltage,
a reference potential,
a first resistance element, and
a second resistance element with a temperature coefficient smaller than that of the first resistance element, wherein

a first terminal of the first resistance element and a first terminal of the second resistance element are connected and the connection point of the first terminal of the first resistance element and the first terminal of the second resistance element is connected to a gate terminal of the field effect transistor,

a second terminal of the first resistance element is connected to the bias voltage supply terminal,

a second terminal of the second resistance element is connected to the reference potential,

the field effect transistor and the first resistance element are semiconductor devices formed on the same semiconductor substrate, and

a resistance value of the second resistance element is variable.

2. (Canceled)

3. (Previously Presented) A power amplifier comprising:

a field effect transistor,
a bias voltage supply terminal supplied with a positive bias voltage,
a reference potential,
a first resistance element,

a second resistance element, and
a third resistance element with a temperature coefficient smaller than those of the first resistance element and the second resistance element, wherein

a first terminal of the first resistance element and a first terminal of the second resistance element are connected and the connection point of the first terminal of the first resistance element and the first terminal of the second resistance element is connected to a gate terminal of the field effect transistor,

a second terminal of the second resistance element is connected to a first terminal of the third resistance element,

a second terminal of the first resistance element is connected to the bias voltage supply terminal,

a second terminal of the third resistance element is connected to the reference potential,

the field effect transistor, the first resistance element, and the second resistance element are semiconductor devices formed on the same semiconductor substrate, and

a resistance value of the third resistance element is variable.

4. (Canceled)

5. (Previously Presented) A power amplifier comprising:

a field effect transistor,

a bias voltage supply terminal supplied with a positive bias voltage,

a reference potential,

a first resistance element,

a second resistance element with a temperature coefficient smaller than that of the first resistance element, and

a third resistance element with a temperature coefficient smaller than that of the first resistance element, wherein

a first terminal of the first resistance element and a first terminal of the second resistance element are connected,

a second terminal of the second resistance element and a first terminal of the third resistance element are connected,

a connection point of the second terminal of the second resistance element and the first terminal of the third resistance element is connected to a gate terminal of the field effect transistor,

a second terminal of the first resistance element is connected to the bias voltage supply terminal,

a second terminal of the third resistance element is connected to the reference potential,

the field effect transistor and the first resistance element are semiconductor devices formed on the same semiconductor substrate, and

a resistance value of the third resistance element is variable.

6. (Canceled)

7. (New) The power amplifier as set forth in claim 1, wherein a bias current of the field effect transistor can be set voluntarily via the variable resistance value of the second resistance element.

8. (New) The power amplifier as set forth in claim 3, wherein a bias current of the field effect transistor can be set voluntarily via the variable resistance value of the third resistance element.

9. (New) The power amplifier as set forth in claim 5, wherein a bias current of the field effect transistor can be set voluntarily via the variable resistance value of the third resistance element.

10. (New) The power amplifier as set forth in claim 1, wherein linearity of the power amplifier is independent from ambient temperature.

11. (New) The power amplifier as set forth in claim 3, wherein linearity of the power amplifier is independent from ambient temperature.

12. (New) The power amplifier as set forth in claim 5, wherein linearity of the power amplifier is independent from ambient temperature.